CLAIMS:

1. A device (1) for decrypting encrypted images, the device comprising:
   - an array of sensor elements (11) for sensing a first image (A), and
   - an array of display elements (12) for displaying a second image (B),
   - wherein at least some display elements are combined elements (13) which comprise integrated sensor elements.

2. The device according to claim 1, wherein the combined elements (13) are constituted by polymer organic LED elements.

3. The device according to claim 1, wherein the combined elements (13) are constituted by small molecule organic LED elements.

4. The device according to any of the preceding claims, wherein the sensor elements (11) and the display elements (12) face in the same direction.

5. The device according to any of claims 1-3, wherein the sensor elements (11) and the display elements (12) face in opposite directions.

6. The device according to any of the preceding claims, wherein the array of display elements (12) is substantially transparent.

7. The device according to any of claims 1-5, wherein the array of display elements (12) is substantially opaque, the device preferably being arranged for permuting the first image (A) so as to produce the second image (B).

8. The device according to any of the preceding claims, wherein the first image (A) comprises positioning information for positioning the device.

9. The device according to any of the preceding claims, wherein the first image (A) comprises user identification information.

10. The device according to any of the preceding claims, further arranged for receiving user input via the sensor elements (11) and transmitting the user input to a terminal (2).

11. A system for visual cryptography, comprising a device (1) according to any of claims 1- 10.

12. An array of combined display elements (13) having integrated sensor elements (11) for use in the device according to any of claims 1-10.